Hazardous Statements

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

 Harmful if inhaled or absorbed through skin. Avoid breathing spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Personal Protective Equipment (PPE) Applicators and other handlers must wear:
- Long-sleeved shirt and long pants
- Shoes plus socks

Hand-wand applicators must wear dust/mist filtering respirators (NIOSH-approved N95 or higher), or a RESPIR reviewed respirator with N, R, P or HE filter when applying this product.

Follow manufacturer's instructions for cleaning/keeping PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from washing. 

User Safety Recommendations

Use of ReTain shall not be associated with any of the following benefits associated with ReTain:
- Improved fruit quality
- Improved fruit size
- Improved fruit color
- Improved fruit firmness

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult your state regulatory agency for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS Use this product with confidence. Its labeling and with the Worker Protection Standard, 40 CFR part 190. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements in this labeling about Personal Protective Equipment (PPE), and restricted-entry entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. PPE required for entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: • Coveralls • Waterproof gloves • Shoes plus socks

GENERAL INFORMATION FOR USE

IMPORTANT: Before application, read all use directions thoroughly. Use ReTain only as directed. For specific information on the best use practices for your location consult your Valent Agronomy Specialist (1-800-6-VALENT).

ReTain contains 15% (wt/wt) [S]-2-amino-4-(2-aminoethoxy)butanoic acid hydrochloride, commonly known as aminoethoxyvinylgycine, avicine HCl, or AVG HCl. AVG HCl is a potent plant growth regulator produced by several genera. AVG HCl inhibits the production of ethylene in plant tissues. Ethylene affects plant processes such as flower development, fruit set, fruit maturation, fruit ripening, and fruit abscission.

GENERAL APPLICATION INSTRUCTIONS

IMPORTANT:
Do not apply this product through any type of irrigation system.
ReTain is packaged in a water-soluble bag sealed inside a metalized polyethylene pouch. Each water-soluble bag contains 11.7 oz (333 grams) of ReTain. Once the outer pouch is opened, the entire water-soluble bag must be used.
Because the proper timing of ReTain application is particularly important to product performance, serious consideration is to be given, on a block-by-block basis, to any site conditions (e.g., elevation, sun exposure, soil texture), growing conditions (e.g., prevailing or anticipated weather patterns such as high temperature, chilling, drought or flood conditions, and production practices such as, crop load, sprayer condition that could impact flowering, fruit set, or fruit maturation during the course of the season.

On tree crops and for application to ReTain in a sufficient amount of water to ensure that flowers, fruits, and foliage receive thorough and properly calibrated spray equipment. Adjust water volumes based on plant size and spacing. However, excessive spray application volumes resulting in spray runoff will reduce product efficacy.

On pineapple, apply ReTain to the plant core (apex of the meristem) of pre-flowering plants in a sufficient amount of water to ensure thorough coverage.

Prepare spray solution by mixing the required amount of product with water in a clean, empty spray tank. Dispose of any unused spray material at the end of each day.

Avoid applications during the heat of the day. For best results, apply ReTain under slow drying conditions, e.g., early in the morning or at night, in order to maximize absorption.

Maintain solution pH between 6 and 8.

For apples, pear, stone fruit, walnut, pecan, cucumber and pineapple

AAPLE AND PEAR – FOR HARVEST MANAGEMENT AND IMPROVEMENT OF FRUIT QUALITY

CROP
OBJECTIVE / BENEFIT
APPLICATION TIME / USE INSTRUCTIONS

Apple
Depending on cultivar, orchard conditions, application timing, and grower objectives, one or more of the following benefits will be associated with ReTain:
- Improved fruit quality
- Improved fruit size
- Improved fruit color
- Improved fruit firmness
- Additional time for increase in fruit size
- Maintenance of flower meristem
- Improved fruit quality (e.g., reduced incidence and/or severity of watercore and stem bowing cracking)
- Enhanced storage potential

Single Pick Harvest: Apply one pouch of ReTain per acre to three to four weeks prior to the anticipated beginning of the normal harvest period of untreated fruit for the current season. ReTain applied three to four weeks before harvest will delay the harvest period up to 7 to 10 days. Applications made either too late or too early will significantly reduce the efficacy of the product.

Multiple Pick Harvest: To improve the fruit quality and storage potential of late picked apples (2nd, 3rd, 4th, and later picks) apply one pouch of ReTain per acre to the anticipated beginning of the normal harvest period of untreated fruit for the current season. ReTain applied one to two weeks before harvest typically will not delay the start of the harvest (1st pick), but will help control the maturation rate of the later picks.

Pear
ReTain will offer one or more of the same benefits as listed for apples, depending on the cultivar, growing conditions, and grower objectives.

Apply one pouch of ReTain per acre 7 to 16 days prior to the anticipated beginning of the normal harvest period of untreated fruit for the current season.

FOR USE ON APPLE, PEAR, STONE FRUIT, WALNUT, PECAN, CUCUMBER AND PINEAPPLE

KEEP OUT OF REACH OF CHILDREN

CAUTION

GENERAL INFORMATION FOR USE

IMPORTANT: Before application, read all use directions thoroughly. Use ReTain only as directed. For specific information on the best use practices for your location consult your Valent Agronomy Specialist (1-800-6-VALENT).

ReTain contains 15% (wt/wt) [S]-2-amino-4-(2-aminoethoxy)butanoic acid hydrochloride, commonly known as aminoethoxyvinylglycine, avicine HCl, or AVG HCl. AVG HCl is a potent plant growth regulator produced by several genera. AVG HCl inhibits the production of ethylene in plant tissues. Ethylene affects plant processes such as flower development, fruit set, fruit maturation, fruit ripening, and fruit abscission.

FOR USE ON APPLE, PEAR, STONE FRUIT, WALNUT, PECAN, CUCUMBER AND PINEAPPLE

KEEP OUT OF REACH OF CHILDREN

CAUTION

GENERAL INFORMATION FOR USE

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Because the proper timing of ReTain application is particularly important to product performance, serious consideration is to be given, on a block-by-block basis, to any site conditions (e.g., elevation, sun exposure, soil texture), growing conditions (e.g., prevailing or anticipated weather patterns such as high temperature, chilling, drought or flood conditions, and production practices such as, crop load, sprayer condition that could impact flowering, fruit set, or fruit maturation during the course of the season.

On tree crops and for application to ReTain in a sufficient amount of water to ensure that flowers, fruits, and foliage receive thorough and properly calibrated spray equipment. Adjust water volumes based on plant size and spacing. However, excessive spray application volumes resulting in spray runoff will reduce product efficacy.

On pineapple, apply ReTain to the plant core (apex of the meristem) of pre-flowering plants in a sufficient amount of water to ensure thorough coverage.

Prepare spray solution by mixing the required amount of product with water in a clean, empty spray tank. Dispose of any unused spray material at the end of each day.

Avoid applications during the heat of the day. For best results, apply ReTain under slow drying conditions, e.g., early in the morning or at night, in order to maximize absorption.

Maintain solution pH between 6 and 8.

For apples, pear, stone fruit, walnut, pecan, and cucumber.

do not apply ReTain to plants or fruit under stress (e.g., heat, water, disease, insect). Injured or stressed plants or fruits may not respond to ReTain.

ReTain may be applied to pineapple plants under stress conditions that induce Natural Induction (NI) of flowering, also known as Naturally Differentiated Flowering (NDF). Do not use overhead cooling or irrigation equipment for at least 8 hours following ReTain application.

Do not apply ReTain if rain is expected within 8 hours of application.

COMPLIABILITY WITH OTHER AGRICULTURAL PRODUCTS

ReTain can be tank-mixed with DiPel®, BioBt®, and XenTari® biological insecticides. Compatibility and performance data for ReTain with other agricultural products are not available.

Do not tank mix ReTain with other products unless compatibility has been verified. If considering tank mixing ReTain with other products use the following compatibility jar test before mixing a whole tank.

- Add water from the same water source to a clear glass or plastic jar. Add the pesticides in correct proportions. Mix thoroughly and let stand for a minimum 15 minutes. Separation, gelling, or generation of heat are all signs of incompatibility.

Even if a mix passes the jar test for compatibility, it is imperative to test it on a designated area to evaluate for photosynthetic or ineffective.

Always read and follow all label directions and precautions of each product. When combinations of products the most restrictive of label limitations and precautions must be followed. Do not mix any pesticides that have a prohibition against tank mixing. For more information consult your Valent Agronomy Specialist (1-800-6-VALENT).
KEEP OUT OF REACH OF CHILDREN

CAUTION

If inhaled

If on skin or clothing

Active Ingredient:

(S)-trans-2-Amino-4-(2-aminoethoxy)-
3-butenoic acid hydrochloride . . . . . . . . . . . . . . 15% w/w

Other Ingredients . . . . . . . . . . . . . . . . . . . . . . . . . 85% w/w

Total . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 100%

Always read and follow label directions and use this product only as directed on the label.

A single application of one pouch will treat up to 1.0 acre of listed fruit crops, 0.5 acre of listed nut crops, 0.33 acre of pineapple, and 0.17 acre of cucumbers grown for seed at the maximum use rate.

Please see attached Application Guide for complete precautionary statements and directions for use.

– Move person to fresh air.
– If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.
– Call a poison control center or doctor for further treatment advice.
– Take off contaminated clothing.
– Rinse skin immediately with plenty of water for 15-20 minutes.
– Call a poison control center or doctor for treatment advice.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-892-0099 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-6-VALENT (682-5368).

If inhaled

Aerosol ingestion can cause severe irritation and respiratory distress. Call 911 or a doctor.

If on skin or clothing

Rinse with water for at least 15 minutes. If skin irritation continues, call a doctor.

If absorbed

Seek medical advice.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. Refer to Supplemental Labeling under “AGRICULTURAL USE REQUIREMENTS” in the DIRECTIONS FOR USE section for information about this standard.

EPA Reg. No. 73049-45

EPA Est. No. 33762-IA-001 (Lot No. Suffix ‘S4’)

EPA Est. No. 33967-NJ-1 (Lot No. Suffix ‘Q5’)

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STONE FRUIT (EXCEPT CHERRY) – FOR HARVEST MANAGEMENT AND IMPROVEMENT OF FRUIT QUALITY

<table>
<thead>
<tr>
<th>CROP</th>
<th>OBJECTIVE / BENEFIT</th>
<th>APPLICATION TIMING / USE INSTRUCTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apricot</td>
<td>To increase fruit set.</td>
<td>Apply one pouch of ReTain per acre, as a single application from pink stage to full bloom. Applications made prior to pink stage or after full bloom will significantly reduce efficacy of the treatment. Do not apply petal fall.</td>
</tr>
<tr>
<td>Nectarine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prune</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Application Timing / Use Instructions:
- Improved harvest management
- Additional time for increase in fruit size
- Maintenance of fruit firmness
- Reduced preharvest fruit drop
- Improved fruit quality
- Enhanced storage potential

Water Volume: The normal harvest period for a particular orchard block refers to that time when fruits not treated with ReTain would be harvested. To help determine the beginning of the normal harvest period, refer to historical trends for harvest dates and the “days from full bloom to harvest” interval for each cultivar in your area, and closely monitor the fruit maturity development for the current season.

Use of Adjuvants: For optimal response, use ReTain with a 100% organosilicone surfactant. Use a final surfactant concentration of 0.05 to 0.1% (v/v) in the spray tank. To reduce foaming, add the adjuvant last and minimize agitation.

Harvest: The normal harvest period for a particular orchard block refers to that time when fruits not treated with ReTain would be harvested. To help determine the beginning of the normal harvest period, refer to historical trends for harvest dates and the “days from full bloom to harvest” interval for each cultivar in your area, and closely monitor the fruit maturity development for the current season.

Additional Notes: Pre Harvest Interval (PHI): ReTain has a 7-day PHI for labeled Stone Fruit.

NUT, POME AND STONE FRUIT CROPS – FOR INCREASING FRUIT AND NUT SET

<table>
<thead>
<tr>
<th>CROP</th>
<th>OBJECTIVE / BENEFIT</th>
<th>APPLICATION TIMING / USE INSTRUCTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
<td>To increase fruit set.</td>
<td>Apply one pouch of ReTain per acre, as a single application from pink stage to full bloom. Applications made prior to pink stage or after full bloom will significantly reduce efficacy of the treatment. Do not apply petal fall.</td>
</tr>
<tr>
<td>Cherry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>European Pear</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prune</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pecan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walnut</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Application Timing / Use Instructions:
- Improved harvest management
- Additional time for increase in fruit size
- Maintenance of fruit firmness
- Reduced preharvest fruit drop
- Improved fruit quality
- Enhanced storage potential

Water Volume: The normal harvest period for a particular orchard block refers to that time when fruits not treated with ReTain would be harvested. To help determine the beginning of the normal harvest period, refer to historical trends for harvest dates and the “days from full bloom to harvest” interval for each cultivar in your area, and closely monitor the fruit maturity development for the current season.

Use of Adjuvants: For optimal response, use ReTain with a 100% organosilicone surfactant. Use a final surfactant concentration of 0.05 to 0.1% (v/v) in the spray tank. To reduce foaming, add the adjuvant last and minimize agitation.

Harvest: The normal harvest period for a particular orchard block refers to that time when fruits not treated with ReTain would be harvested. To help determine the beginning of the normal harvest period, refer to historical trends for harvest dates and the “days from full bloom to harvest” interval for each cultivar in your area, and closely monitor the fruit maturity development for the current season.

Additional Notes: Pre Harvest Interval (PHI): ReTain has a 7-day PHI for labeled Stone Fruit.

CUCUMBER – FOR SEED PRODUCTION ONLY

<table>
<thead>
<tr>
<th>CROP</th>
<th>OBJECTIVE / BENEFIT</th>
<th>APPLICATION TIMING / USE INSTRUCTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cucumber</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Application Timing / Use Instructions:
- Improved harvest management
- Additional time for increase in fruit size
- Maintenance of fruit firmness
- Reduced preharvest fruit drop
- Improved fruit quality
- Enhanced storage potential

Water Volume: Apply ReTain in a sufficient amount of water to ensure good thorough coverage. In most cases, 26 to 52 gallons per acre treated will be sufficient. The application rate and frequency of application will depend on the sensitivity of the individual insecticide line to ReTain and yellowing can occur at high rates. If unacceptable leaf yellowing is noted, use lower concentrations in subsequent applications.

Dilution Table: Parts Per Million (ppm) AVG HCl with varying Gallons (gal) of spray solution and pouches of ReTain for cucumber use.

<table>
<thead>
<tr>
<th>Gal Spray Solution</th>
<th>Pouches of ReTain</th>
<th>Grams AVG HCl</th>
<th>PPM AVG HCl</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>1</td>
<td>50</td>
<td>1000</td>
</tr>
<tr>
<td>26</td>
<td>1</td>
<td>50</td>
<td>500</td>
</tr>
<tr>
<td>52</td>
<td>1</td>
<td>50</td>
<td>250</td>
</tr>
</tbody>
</table>

Use of Adjuvants: Addition of an adjuvant to ReTain increases the likelihood of leaf yellowing in young cucumber plants.

Additional Note: Do not reapply ReTain within 24-hours of application. Use of ReTain on cucumber is for gynoecious breeding line and hybrid seed production only. Do not apply directly to, or allow spray to drift to cucumber crops grown for fresh or processed markets. Fruit from plants treated with ReTain is not to be used for human or animal consumption.

PINEAPPLE

<table>
<thead>
<tr>
<th>CROP</th>
<th>OBJECTIVE / BENEFIT</th>
<th>APPLICATION TIMING / USE INSTRUCTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pineapple</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Application Timing / Use Instructions:
- Improved harvest management
- Enhanced storage potential
- Improved harvest periods
- Continuously control of NDF after the first application of ReTain, will require weekly applications of ReTain during the entire period of NDF susceptibility up to 7 days prior to forcing.

Water Volume: ReTain efficacy requires that the plant core receive thorough spray coverage. Insufficient spray application volumes or uneven application patterns will reduce product performance. Spray volumes of 185 to 250 gallons per acre have been shown to be most effective.

Use of Adjuvants: May be used with a 100% organosilicone surfactant at a final surfactant concentration of 0.05% (v/v).

To reduce foaming, add the adjuvant last and minimize agitation.

IMPORTANT:
- Apply ReTain to pineapple plants only prior to initiation of flowering. Subsequent applications of ReTain to pineapple plants and fruit that have undergone NDF will result in malform fruit.
- Do not spray or allow drift onto pineapple plants that have initiated induction, are in bloom or have fruit.
- Do not apply ReTain to pineapples if chilling and other conditions that favor NDF have occurred prior to the first scheduled application.
- Continued control of NDF after the first application of ReTain, will require weekly applications of ReTain during the entire period of NDF susceptibility up to 7 days prior to forcing.
- If more than 7 days have elapsed since the previous ReTain application, pineapples will again become susceptible to NDF even if previously treated with ReTain.
- A chilling event or other conditions that favor NDF have occurred later than 7 days from the previous application, but before subsequent ReTain applications can be made, make additional ReTain application to pineapples to avoid the occurrence of malformed fruit.
- Combination effects and potential interactions between ReTain and other agricultural products have not been thoroughly tested. Tank-mixing ReTain with other agricultural products may reduce the efficacy of ReTain.
- ReTain requires an 8-hour rain-free period after application.

STORAGE AND DISPOSAL

- Do not contaminate water, food, or feed by storage or disposal.
- Pesticide Storage: Store product in a cool and dry place. Avoid extended storage conditions at temperatures above 25°C (77°F).
- Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.
- Container Handling: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Completely empty container into approved waste equipment. If recycling is not available dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

NOTICE TO USER

Warranty and Disclaimer Statement: To the extent consistent with applicable law, seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning the use of this product other than as indicated on the label. To the extent consistent with applicable law, user assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

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